## PATENT ASSIGNMENT

## Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE:      | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

## **CONVEYING PARTY DATA**

| Name              | Execution Date |
|-------------------|----------------|
| Jay D. Harker     | 07/24/2012     |
| Marek J. Marasch  | 07/24/2012     |
| Jeff S. Brown     | 07/24/2012     |
| Mark F. Turner    | 07/24/2012     |
| Carol A. Anderson | 07/24/2012     |
| Jay Daugherty     | 07/24/2012     |

## **RECEIVING PARTY DATA**

| Name:           | LSI Corporation  |
|-----------------|------------------|
| Street Address: | 1621 Barber Lane |
| City:           | Milpitas         |
| State/Country:  | CALIFORNIA       |
| Postal Code:    | 95035            |

### PROPERTY NUMBERS Total: 1

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 13559421 |

## **CORRESPONDENCE DATA**

Fax Number: 972-480-88 Phone: 972-480-8800

Email: docket@hittgaines.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: HITT GAINES, PC LSI Corporation

Address Line 1: PO BOX 832570

Address Line 4: RICHARDSON, TEXAS 75083

| ATTORNEY DOCKET NUMBER: | L12-0931US2 |
|-------------------------|-------------|
|                         |             |

REEL: 028650 FRAME: 0898

**PATENT** 

| NAME OF SUBMITTER:           | J. Joel Justiss |
|------------------------------|-----------------|
| Total Attachments: 14        |                 |
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PATENT REEL: 028650 FRAME: 0899

#### ASSIGNMENT AGREEMENT

I, Jay D. Harker, Marek J. Marasch, Jeff S. Brown, Mark F. Turner, Carol A. Anderson, and Jay Daugherty hereby declare that I am the sole inventor (if only one inventor is named) or a joint inventor (if plural inventors are named) of the inventions related to:

## SYSTEM FOR DECREASING SIGNAL INTEGRITY NOISE BY USING VARYING DRIVE STRENGTHS BASED ON LIKELIHOOD OF SIGNALS BECOMING VICTIMS

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I hereby sell, assign and transfer to **LSI Corporation**, a corporation of the State of Delaware, having an office at 1621 Barber Lane, Milpitas, CA 95035, United States of America, and its successors, assigns and legal representatives (collectively "Assignee"), my entire right, title and interest, for the United States and all foreign countries, in and to the inventions and all the rights and privileges under any and all Letters Patent that may be granted therefore, including any divisionals, continuations, reissues and extensions thereof.

I agree that when requested I will, without charge to Assignee but at its expense, sign all papers,, take all rightful oaths, make all rightful declarations and do all acts which may be necessary,, desirable or convenient for securing and maintaining patents or other forms of protection for the inventions in any and all countries and for vesting title thereto in Assignee.

I agree that I will communicate to Assignee or its representatives any facts known to me respecting the inventions, and when requested by Assignee I will testify in any legal proceedings relating to the inventions at Assignee's expense, and generally do everything possible to aid Assignee to obtain or enforce proper protection for the inventions in any and all countries.

I authorize and empower Assignee to make applications for patent or other form of protection for the inventions in Assignee's own name, or in my name, in any and all countries, and to invoke and claim for any application for patent or other form of protection for the inventions filed by Assignee the benefit of all rights of priority provided by any and all treaties, conventions or agreements without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or similar document which may be required in any country for any purpose, including proof of the right of Assignee to apply for patent or other form of protection for the inventions, and to claim the aforesaid benefit of the right of priority.

I covenant with Assignee that, to the best of my knowledge, the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have the full right to convey the same as herein expressed.

I authorize attorneys for Assignee to insert the filing date and serial number into this assignment after the application for Letters Patent has been filed and a serial number has been assigned to such application.

This assignment supersedes all other assignments, agreements and addendums related to the inventions referenced herein.

PATENT REEL: 028650 FRAME: 0900

IN WITNESS WHEREOF, I have hereunto signed my name on the day and year set forth below.

FIRST INVENTOR

**.** 

United States of America

State of Colorado

) ss.:

County of to which

Notary Public

SUE-ELLEN BERENS NOTARY PUBLIC STATE OF COLORADO

My Commission Expires 10/17/14

SECOND INVENTOR

Marek J. Marasch

Date: 1/24/12

United States of America

State of Colorado

) ss.;

County of Boulden )

On this \_\_\_\_\_\_\_day of\_\_\_\_\_\_, 2012, before me personally came Marek J. Marasch, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

SUE-ELLEN BERENS NOTARY PUBLIC STATE OF COLORADO

My Commission Expires 10/17/14

THIRD INVENTOR

|                          | Jeff. S. Brown                                                                                                        |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------|
|                          | Date: 7/24/(2                                                                                                         |
| United States of America | )                                                                                                                     |
| State of Colorado        | ) ss.:                                                                                                                |
| County of Bouldes        | _ )                                                                                                                   |
|                          | y of, 2012, before me personally came Jef<br>dividual described in and who executed the foregoing instrument<br>same. |
|                          | Sur Ellen Berens<br>Notary Public                                                                                     |
|                          | SUE-ELLEN BERENS<br>NOTARY PUBLIC                                                                                     |

**FOURTH INVENTOR** 

Mark F. Turner

Date: 24 July 2012

United States of America

State of Colorado ) ss.:

County of Boulder )

Notary Public

SUE-ELLEN BERENS NOTARY PUBLIC STATE OF COLORADO

My Commission Expires 10/17/14

| Carol A. Anderson  Date:  United States of America  State of Minnesota  ) ss.:  County of  On this day of, 2012, before me personally came Carol A. Anderson, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same. |                                                     | File No.: L12-0931US2                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------|
| United States of America  State of Minnesota  ) ss.:  County of)  On thisday of, 2012, before me personally came Carol A. Anderson, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.                           |                                                     | FIFTH INVENTOR                              |
| United States of America  ) State of Minnesota  ) ss.:  County of  On thisday of, 2012, before me personally came Carol A. Anderson, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.                          |                                                     | Carol A. Anderson                           |
| State of Minnesota ) ss.:  County of )  On this day of, 2012, before me personally came Carol A. Anderson, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.                                                    |                                                     | Date:                                       |
| On thisday of, 2012, before me personally came Carol A. Anderson, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.                                                                                             | United States of America )                          |                                             |
| On this                                                                                                                                                                                                                                                                                        | State of Minnesota ) ss.:                           |                                             |
| Carol A. Anderson, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.                                                                                                                                            | County of)                                          |                                             |
|                                                                                                                                                                                                                                                                                                | Carol A. Anderson, to me known to be the individual | described in and who executed the foregoing |
| Notary Public                                                                                                                                                                                                                                                                                  |                                                     | Notary Public .                             |

SIXTH INVENTOR

United States of America

State of Clorado

) ss.:

SUE-ELLEN BERENS NOTARY PUBLIC

STATE OF COLORADO My Commission Expires 10/17/14

### ASSIGNMENT AGREEMENT

I, Jay D. Harker, Marek J. Marasch, Jeff S. Brown, Mark F. Turner, Carol A. Anderson, and Jay Daugherty hereby declare that I am the sole inventor (if only one inventor is named) or a joint inventor (if plural inventors are named) of the inventions related to:

# SYSTEM FOR DECREASING SIGNAL INTEGRITY NOISE BY USING VARYING DRIVE STRENGTHS BASED ON LIKELIHOOD OF SIGNALS BECOMING VICTIMS

| as  | describe   | d  | in a | n a   | oplication | on for | Letters  | Pater  | t of | the | Unite | d Sta | ates | of | America   | filed  | on    |
|-----|------------|----|------|-------|------------|--------|----------|--------|------|-----|-------|-------|------|----|-----------|--------|-------|
|     |            |    |      |       |            | and a  | ssigned  | Serial | No   | /   |       |       |      | ,  | or if not | identi | ified |
| her | e by filin | g  | date | and   | Serial     | numb   | er, exec | uted b | y me | on  | even  | date  | with | my | executio  | n of   | this  |
| Ass | signment   | Ag | reen | nent. |            |        |          |        |      |     |       |       |      |    |           |        |       |

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I hereby sell, assign and transfer to **LSI Corporation**, a corporation of the State of Delaware, having an office at 1621 Barber Lane, Milpitas, CA 95035, United States of America, and its successors, assigns and legal representatives (collectively "Assignee"), my entire right, title and interest, for the United States and all foreign countries, in and to the inventions and all the rights and privileges under any and all Letters Patent that may be granted therefore, including any divisionals, continuations, reissues and extensions thereof.

I agree that when requested I will, without charge to Assignee but at its expense, sign all papers,, take all rightful oaths, make all rightful declarations and do all acts which may be necessary,, desirable or convenient for securing and maintaining patents or other forms of protection for the inventions in any and all countries and for vesting title thereto in Assignee.

I agree that I will communicate to Assignee or its representatives any facts known to me respecting the inventions, and when requested by Assignee I will testify in any legal proceedings relating to the inventions at Assignee's expense, and generally do everything possible to aid Assignee to obtain or enforce proper protection for the inventions in any and all countries.

I authorize and empower Assignee to make applications for patent or other form of protection for the inventions in Assignee's own name, or in my name, in any and all countries, and to invoke and claim for any application for patent or other form of protection for the inventions filed by Assignee the benefit of all rights of priority provided by any and all treaties, conventions or agreements without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or similar document which may be required in any country for any purpose, including proof of the right of Assignee to apply for patent or other form of protection for the inventions, and to claim the aforesaid benefit of the right of priority.

I covenant with Assignee that, to the best of my knowledge, the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have the full right to convey the same as herein expressed.

I authorize attorneys for Assignee to insert the filing date and serial number into this assignment after the application for Letters Patent has been filed and a serial number has been assigned to such application.

This assignment supersedes all other assignments, agreements and addendums related to the inventions referenced herein.

PATENT REEL: 028650 FRAME: 0907

| IN WITNESS WHEREOF, I have hereunto | signed my name on the day and year set forth below.                                               |
|-------------------------------------|---------------------------------------------------------------------------------------------------|
|                                     |                                                                                                   |
|                                     | FIRST INVENTOR                                                                                    |
|                                     |                                                                                                   |
|                                     | Jay D. Harker                                                                                     |
|                                     |                                                                                                   |
|                                     | / Date:                                                                                           |
|                                     |                                                                                                   |
| United States of America )          |                                                                                                   |
| State of Colorado )                 | ss./                                                                                              |
| County of)                          |                                                                                                   |
| /                                   | /                                                                                                 |
| On thisday of                       | , 2012, before me personally came Jay<br>I described in and who executed the foregoing instrument |
|                                     |                                                                                                   |
|                                     | Notary Public                                                                                     |
|                                     | resary rashe                                                                                      |
|                                     |                                                                                                   |

|                                                     | SECOND INVENTOR                                                               |
|-----------------------------------------------------|-------------------------------------------------------------------------------|
|                                                     |                                                                               |
|                                                     | Marek J. Marasch                                                              |
|                                                     | Date:                                                                         |
|                                                     |                                                                               |
| United States of America )                          |                                                                               |
| State of Colorado ) ss.:                            |                                                                               |
| County of )                                         |                                                                               |
| On thisday of                                       | , 2012, before me personally came described in and who executed the foregoing |
|                                                     |                                                                               |
|                                                     | Notary Public                                                                 |
|                                                     |                                                                               |
|                                                     |                                                                               |
| instrument, and acknowledged execution/of the same. |                                                                               |

|                                                                                                     |             | THIRD INVENTOR                                                                              |
|-----------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------|
|                                                                                                     |             | Jeff S. Brown                                                                               |
|                                                                                                     |             | Date:                                                                                       |
| United States of America                                                                            | ,           |                                                                                             |
| United States of America                                                                            | )           |                                                                                             |
| State of Colorado                                                                                   | ) ss.:      |                                                                                             |
| County of                                                                                           | )           |                                                                                             |
| On thisday of<br>S. Brown, to me known to be the individu<br>and acknowledged execution of the same | al describe | , 2012, before me personally came Jeff<br>ped in and who executed the foregoing instrument, |
|                                                                                                     | / _         |                                                                                             |
|                                                                                                     |             | Notary Public                                                                               |

File No.: L12-0931US2

FOURTH INVENTOR

Mark F. Turner

Date:

United States of America
)
State of Colorado
) ss.:

County of \_\_\_\_\_\_
)

On this \_\_\_\_\_\_day of \_\_\_\_\_, 2012, before me personally came Mark F. Turner, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Carol A. Anderson

Date: July 24, 2012

| United States of America                                                   | )                                                                                                     |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| State of Minnesota                                                         | ) ss.:                                                                                                |
| County of Dakota                                                           | )                                                                                                     |
| On this <u>24<sup>th</sup></u> day of Carol A. Anderson, to me known to be | of Twy , 2012, before me personally came e the individual described in and who executed the foregoing |

instrument, and acknowledged execution of the same.

CHERYL J. WILLS
Notary Public
State of Minnesote
My Commission Expires
January 31, 2015

|                                                                                  |          | File No.: L12-0931US2                       |
|----------------------------------------------------------------------------------|----------|---------------------------------------------|
|                                                                                  |          | SIXTH INVENTOR                              |
|                                                                                  |          |                                             |
|                                                                                  |          | Jay Daugherty                               |
|                                                                                  |          | Date:                                       |
|                                                                                  |          |                                             |
| United States of America                                                         | )        |                                             |
| State of Clorado                                                                 | ) ss.: / | /                                           |
| County of                                                                        | )        |                                             |
| On thisday of                                                                    |          | , 2012, before me personally came           |
| Carol A. Anderson, to me known to be t<br>instrument, and acknowledged execution |          | described in and who executed the foregoing |
|                                                                                  |          |                                             |
|                                                                                  |          | Notary Public                               |
|                                                                                  |          |                                             |
|                                                                                  |          |                                             |

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